

## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2019/0073043 A1

Schalla et al. (43) **Pub. Date:** 

Mar. 7, 2019

### (54) AIRCRAFT HAVING GESTURE-BASED CONTROL FOR AN ONBOARD PASSENGER SERVICE UNIT

(71) Applicant: THE BOEING COMPANY, Chicago, IL (US)

(72) Inventors: James P. Schalla, Edmonds, WA (US); Calsee N. Robb, Seattle, WA (US); William A. Harkness, Everette, WA (US); Buddy L. Sharpe, Mill Creek, WA (US); Heidi J. Kneller, Bellevue,

WA (US)

(21) Appl. No.: 16/180,353

(22) Filed: Nov. 5, 2018

#### Related U.S. Application Data

(63) Continuation of application No. 15/353,374, filed on Nov. 16, 2016, now Pat. No. 10,146,320, which is a continuation of application No. 11/927,517, filed on Oct. 29, 2007, now abandoned.

#### **Publication Classification**

(51) **Int. Cl.** G06F 3/01 (2006.01)B64D 11/00 (2006.01)G06F 3/03 (2006.01)G06K 9/00 (2006.01)

B64C 1/14 (2006.01)B64D 47/02 (2006.01)B64D 13/00 (2006.01)

(52) U.S. Cl.

CPC ....... G06F 3/017 (2013.01); B64D 11/0015 (2013.01); G06F 3/0304 (2013.01); G06K 9/00355 (2013.01); B64D 2011/0053 (2013.01); B64D 47/02 (2013.01); B64D 13/00 (2013.01); B64D 2013/003 (2013.01); **B64C 1/1476** (2013.01)

#### (57)ABSTRACT

An aircraft is provided that includes a passenger service unit for a passenger seated in a seat in its cabin. The aircraft includes a camera configured to acquire an image of the passenger, and a control module configured to at least receive the image of the passenger. The control module is configured to receive non-tactile gesture preference data and dominant hand data, and access a non-tactile gesture data store that includes a plurality of images of non-tactile hand signals or non-tactile hand gestures. Based on the foregoing, the control module is configured to generate non-tactile gesture data in accordance with and indicative of a nontactile hand signal or a non-tactile gesture made by the passenger. And the control module is configured to control one or more cabin systems including in at least one instance the passenger service unit based on the non-tactile gesture data.

